Overview of SYBAC Meeting – 10/13/15

1st Hour Discussion: Introductions/backgrounds & overview from Ric about ICN and SYBAC.

SYBAC Students:
   Caleb Beerbower, Southeast Polk HS
   Brent Brain, Muscatine
   Kaylee Daniels, Oskaloosa HS
   Gabe Golberg, Mount Vernon HS
   Austin Kallemeyn, Sioux Center Community HS
   Stephanie Lapointe, Newman Catholic HS
   Aaron Mark, Burlington HS
   Zach Mass, Treynor Community HS
   Bryce Snell, Ballard HS
   Brookelyn Wahlert, CAM HS
   Hunter Werner, Louisa-Muscatine Jr. /Sr. Schools *(absent)*

What is the biggest technological challenge?
- **Switching the generations** – Students are the next generation that understand technology. Notice the difference between teachers that don't use technology, and students learn technology fast.
  - Students are teaching educators.
  - Gaming is a new life skill for the youth.
- **Trying to find content** – Have hardware, but not electronic content.
- **Getting broadband to be available to everyone.** One student discussed that he upgraded to microwave technology (PointNet). Discussed Premiere Communications. HughesNet – Satellite.
- **Dead zones** – need to walk out of classroom (into hallway) to get Wi-Fi connection.
  - When an entire class is using a digital device, the class runs slower since everyone is trying to connect to the same website.
- **Digital devices / Cell phones** – Some schools let students use their phones, other schools can only connect their personal devices to the Wi-Fi. Some schools have policies for only school-issued devices.
  - Discussed filtering.
  - Students feel that they can handle having devices in the classroom (personal or school-issued).
  - YouTube has turned into a powerful educational tool. Big consumer of bandwidth.
- **Too many digital tools that teachers are trying to incorporate into lessons.** Students feel that teachers are skimming over lessons, instead of teaching from websites.

What does the future hold in the next 10 years in technology?
- The laptop will be replaced by the cell phone/tablet. Laptop short-lived.
  - Laptop is slowly changing – Microsoft has created a laptop that can be used as a tablet. (Microsoft surface book.)
    - Downside – cost, hard to get hardware. Demands more broadband.
    - The faster the devices are the more broadband one will need.
- Cash registers are electronic – The electronic gadgets are going away and everything is becoming more virtual. Discussed Bitcoin (payment network).

2nd Hour Discussion: *Austin Kallemeyn* chaired the student-led discussions.

Interactive student conservations:
- **How will improving technology make Iowa a safer state for schools?**

SYBAC will meet monthly between October – May   https://icn.iowa.gov/benefiting-iowans/sybac

- o Smart phone alert – have option for district wide alerts.
  - o Some school are old brick buildings; don't get good cell coverage unless by a door or window.
  - o Easier for smaller schools – Wi-Fi is better because there aren't as many users.
- **Wireless network tracking** – tags on NFL players to track route efficiency, distance between people, etc. Could wireless networks gather information from other devices to track location if there was a threat inside a building, people could track the threat.
  - o RFID technology maybe in visitor tags
  - o Real-time map into the building.
- **Smartboard technology**
  - o Are they becoming outdated? Do we need them, since we have touch screen technology? What is the next step?
    - ▪ Many smartboards don't work in classrooms or teachers don't know how to use them.
    - ▪ Elmo technology (camera that plugs into computer) – teachers write notes, and it appears on the whiteboard. Some allow recording and uploading to websites.
      - Access notes and videos from home outside of school hours.
    - ▪ Screen sharing – teachers share screen with entire lab. (Whiteboard like experience).
    - ▪ Move away from something big hanging on the wall, to something that is on one's lap.
- **Bridge the technology gap between teachers and students:** should teachers have more training? Being educated about technology.
  - o Teachers should have to conduct a 101 training.
  - o Tech Sessions (Ballard HS) – teachers attend once or twice a month. They learn about new programs and webpages.
- **Helping schools deal with cost issues?**
  - o Students work in IT departments – Teachers receive help from student workers. Students get paid $10/hr or minimum wage plus benefits (i.e. work computer).
    - ▪ Some students work throughout the summer to fix Chrome books and projectors. They also clean computers, inventory, etc.
  - o Junior Tech Program – class period and students receive credit.
- **STEM Classroom** – four big tables with TV on each table.
  - o 'Project lead the way program' – students work with CAD, 3D printers, etc.
  - o Industrial Tech Teacher works with students on PLVW – students get community college credit.
- **Home school classes transitioned to community college classes** – Has technology helped in communicating?
  - o The student explained that homeschool was taking a lot of online classes. Communication using online chatrooms and video conferencing helped in the social aspect before going to community college.
- **Testing on computers in classroom** – Some students take quizzes and testing online. Could more testing be placed on web based programs for instant results?

Next meeting *Brooklyn Wahlert* will lead the discussion. Familiarize yourself with broadband topics within the economic development, healthcare, public safety, government, and education sectors.